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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,271	01/17/2002	Srinivas Tadepalli	S01.12-0815/STL 10262	1310

7590 11/19/2003

Theodore M. Magee  
WESTMAN CHAMPLIN & KELLY  
International Centre - Suite 1600  
900 South Second Avenue  
Minneapolis, MN 55402-3319

EXAMINER
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KLIMOWICZ, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/053,271

Applicant(s)

TADEPALLI ET AL.

Examiner

William J. Klimowicz

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 4-7, 9, 10, 13, 14, 17, 18 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8, 11, 12, 15, 16, 19-21 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Claims 4-7, 9, 10, 13, 14, 17, 18 and 22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 4 (filed September 25, 2003).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 8, 11, 12, 15, 16, 19-21 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Raphael et al. (US 6,614,626 B2).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Art Unit: 2652

As per claim 1, Raphael et al. (US 6,614,626 B2) discloses a data storage device for storing and accessing data, the storage device (100) comprising: a motor (104); at least one movable medium (106) coupled to the motor (104) and capable of being moved by the motor (104) and thereby generating a turbulent airflow; and at least one internal surface (e.g., 150 - FIG. 3) comprising at least two grooves having a groove axis oriented substantially perpendicular to a mean airflow direction so as to reduce interaction between the internal surface and a turbulent airflow generated by the medium (106).

As per claim 2, the internal surface comprises at least three evenly spaced grooves (150).

As per claim 3, wherein the grooves (150) are V-shaped (FIG. 3).

As per claim 8, wherein the internal surface forms part of a suspension (e.g., 112).

Additionally, as per claim 11, a surface (150) for a component in a disc drive (100), the surface comprising; a first groove having a groove axis that is substantially perpendicular to a direction of expected mean air flow (see FIG. 3); and a second groove (another of the V-shaped grooves) proximate the first groove and having a groove axis that is substantially perpendicular to the expected mean air flow such that the first and second grooves cooperate to reduce interaction between vortices in the air flow and the surface - FIG. 3.

As per claim 12, the first groove and the second groove are V-shaped (150).

As per claim 15, wherein the surface forms part of a suspension (e.g., 112).

As per claim 16, wherein the first groove borders the second groove (see FIG. 3).

Art Unit: 2652

Additionally, as per claim 19, a disc drive (100) for storing and accessing data, the disc drive (100) comprising: a moving medium (106) that generates an airflow having eddies in the disc drive (100); and excitation reduction means (grooves (150)) defining a surface in the disc drive (100) for reducing the excitation of the surface by causing eddies in the airflow to be moved away from the surface.

As per claim 20, wherein the excitation reduction means comprises grooves (150) on the surface - FIG. 3.

As per claim 21, wherein the grooves (150) are V-shaped - FIG. 3.

As per claim 23, wherein the grooves (150) are evenly spaced - FIG. 3.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

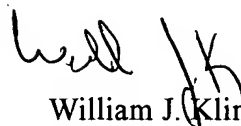
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Application/Control Number: 10/053,271

Page 5

Art Unit: 2652

A handwritten signature in black ink, appearing to read 'William J. Klimowicz', written over the printed name.

William J. Klimowicz  
Primary Examiner  
Art Unit 2652

WJK

November 14, 2003